



Shoptalk

A newsletter about dangerous waste and pollution prevention

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Department of Ecology

Your business is liable for all dangerous wastes you generate. If you are uncertain about your responsibilities as a dangerous waste generator, call your nearest Ecology office and ask for a hazardous waste specialist. For more information on reducing or recycling dangerous waste, ask for the toxics reduction staff at:

Bellevue: (425) 649-7000
Lacey: (360) 407-6300
Yakima: (509) 575-2490
Spokane: (509) 329-3400

To ask about available formats for the visually impaired please call the Hazardous Waste and Toxics Reduction Program at 360-407-6700. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

Shoptalk is produced by the Washington State Department of Ecology's Hazardous Waste and Toxics Reduction Program.

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Clean Up, Clean Out, Follow Through!

So you've cleaned up a dirty situation, but now what do you do with those drums/totes/tanks of stuff? Don't put them out back and forget about them, as one company did.

A local government directed one Washington business to clean combined storm/sewer drains and lines in 2010. That work collected 1,925 gallons – roughly 15,000 pounds – of dangerous waste containing lead and mercury. The business stored this waste in six totes on site.

The local government advised the business to seek assistance from Ecology for proper management because the dangerous waste exceeded the quantity exclusion limit of 2,200 pounds. This made this site a large quantity generator of dangerous waste, and **subject to the 90-day accumulation time limit.**

However, the business failed to follow through. Instead, it **left the six totes on site for more than two years** with no secondary containment.

The Result?

Ecology issued the business an Administrative Order to dispose of the waste promptly, which they did. Ecology informed the facility it would also get a \$10,000 penalty for failing to dispose of the waste within the required time limit and for failing to provide secondary containment during the two years the waste was on site. The business agreed to expedite the penalty process by participating in Ecology's Expedited Enforcement Action Order process and paying \$6,700 of the penalty without appeal.

The Moral of the Story?

Remember to follow up with proper management and disposal after cleaning up a spill or conducting a clean out. Dropping the ball can cost you.



Peek-a-boo? Hidden and forgotten, this tote and others stayed on site for more than two years and led to sizeable penalty for the generator.

NIC Global Manufacturing Solutions

Realizing a Cascade of Savings from Pollution Prevention

The Company

NIC Global Manufacturing Solutions saves about \$150,000 each year through strategic pollution prevention efforts at its Woodinville, WA plant. The facility assembles mechanical and electromechanical devices and fabricates sheet metal.



Eliminated Hexavalent Chromium

The efforts began in 2006, when NIC invested about \$20,000 to initiate a new metal cleaning process that eliminated the use of hexavalent chromium. Hexavalent chromium is a heavy metal that persists in the environment and can accumulate in living things. It can cause health problems and may contribute to certain types of cancer.



Getting away from hexavalent chromium makes NIC Global's plant a healthier place to work.

Previously, NIC evaporated the chromium-containing wastewater to reduce its volume and disposed of the sludge as dangerous waste. The 5,000,000 BTU evaporator system used approximately \$8,000 in natural gas each month.

Eliminating the chromium meant the company could realize savings in multiple areas. In 2008, NIC received a permit from King County to discharge its now chromium-free wastewater to the sanitary sewer. This allowed the company to turn off the evaporator and avoid disposal costs since they no longer produced a dangerous waste sludge. King County presented NIC with a 2010 Gold Award for exemplary compliance with the county's wastewater discharge program.

Energy Efficiency Projects

NIC continued their efforts to reduce costs through strategic energy efficiency projects. The company partnered with the Snohomish County Public Utility District on a \$78,000 re-lighting project to reduce electrical energy usage. They replaced the older fluorescent lighting system with a more efficient system that will save an estimated 40 percent of energy costs. NIC also installed an air compressor system that is more energy efficient. They estimate the new equipment will save another \$25,500 per year.

For more information about NIC Global: www.nicglobalms.com/

Five Minutes to Safer Waste Handling...and Fewer Violations

Got five minutes? Want something to spice up your next safety meeting? Try showing the short video, [Dangerous Waste Containers: an Open and Shut Case](#). This new tool from the Washington Department of Ecology explains the rule on keeping containers of dangerous waste closed.



According to the rule, containers must be closed except when waste is actively being added or removed. And “closed,” means nothing will spill if the container tips over. Seems obvious, but Ecology’s dangerous waste compliance inspectors often find containers that are not properly closed. In fact, it is one of the most common violations. This has even led to penalties in some cases.

The video explains that workers must be sure to lock the rings on drums and screw in the bung plug. They should tightly close lids, screw on caps, and make sure containers are intact. There are locking funnels and container tops that meet the requirement if workers need to frequently add waste to a container.

Besides the danger of spills, containers that are not properly closed can release fumes that can sicken workers and contribute to air pollution.

The video, a narrated slideshow, is available on Ecology’s website. More training modules are in the works for labeling containers and designating waste.

For more information on how to safely handle dangerous waste at your work site, contact your local Ecology office. You can also read:

- [Keep Dangerous Waste Containers Closed](#)
- [Appropriate Containers for Dangerous Waste](#)
- [Shop Guide for Dangerous Waste Management](#) (09-04-015)

Comments Due May 3 on Guidance for Safer Alternative Chemicals

Washington State is looking for your comments on a draft guidance document about finding alternatives to the use of toxic chemicals in products. The document is [Guidance for Alternatives Assessment and Risk Reduction](#). **Comments are due May 3.** Submit comments to this website: <http://blog.purestrategies.com/ecology/Providing-Comments>.

Washington’s Department of Ecology partnered with seven other state environmental agency members of the Interstate Chemicals Clearinghouse to develop the guidance document. The draft document is available for a 45-day public review and comment process through May 3.



“We welcome input, especially from those with industry experience in comparing the potential effects of chemical alternatives,” said K Seiler, manager of the Hazardous Waste and Toxics Reduction Program at Ecology. “The goal of the voluntary guidance is to provide businesses with a flexible and effective approach to alternatives assessment.”

Alternatives assessment is a process that encourages companies to consider the potential harm that alternatives could have on human health and the environment before their use in products. The

Clearinghouse states are working together to help develop common definitions and best practices.

The guidance is based on the alternatives assessment process pioneered by the U.S. Environmental Protection Agency’s (EPA) Design for the Environment Program. The Clearinghouse is working with industry, EPA and others to share results and best practices among all the state members.

After getting input on the draft guidance, the Clearinghouse member states will invite businesses to pilot use of the process.

Visit these websites for more information:

- [IC2 Guidance for Alternatives Assessment and Risk Reduction](#)
- [US EPA’s Design for the Environment Alternatives Assessment Program](#)
- [Safer Chemicals, Safer World](#) (Ecology blog)

Effective Cleaning the Greener Way

Every business needs cleaning products. The next time you’re ordering, consider “green” cleaning products. These are products that use less or no harmful chemicals. They are widely available, safer to use, and just as effective as traditional products. Green cleaners cost no more than other products when coupled with a good cleaning system using improved tools, such as microfiber mops.

How do you know if a cleaning product is “green”? Rely on independent third party certifications, such as Green Seal and Ecologo. (See the links on page 10.) These organizations develop rigorous standards and then certify cleaners to those standards. They evaluate for carcinogens, chemicals that can cause asthma problems, endocrine disruptors and other considerations, such as dilution control.

The benefits of a green cleaning program can go far beyond just the purchase price. For example:



Green cleaning uses less harmful chemicals and improved cleaning equipment.

Lowering costs

- Typically, you can use fewer cleaning chemicals.
- You can control costly overuse by controlling the dilution.
- Microfiber equipment cleans better while requiring less of a product to do the job.
- You can potentially lower your dangerous waste management costs.
- Green cleaning systems may even lower your water bill.

Better management practices

- Good programs train janitorial staff in the most effective, targeted use of chemicals.
- Using less harmful chemicals lowers the potential for splash and exposure injuries to janitorial staff.
- Microfiber mops are lighter weight, which reduces the risk of injury to janitorial workers.
- Green products are easier on surfaces, lengthening the lifespan of furnishings, flooring, and other building materials.
- Green products improve indoor air quality, which can result in higher productivity from all workers.

Look for green cleaning chemicals for all-purpose, floor care, and hand cleaning needs that are certified by:



Look for the label!

You can also check for the label from Design for the Environment. The U.S. Environmental Protection Agency puts it on cleaning chemicals formulated from safer ingredients.

Ecology's new [Buy Green, Save Green website](#) has a lot more information on green purchasing. If you have questions, contact [Tina Simcich](#).

Join a Listserv to Learn About Dangerous Waste Facilities

Ecology is updating the e-mail listserv of people who want to get information on used oil and dangerous waste management facilities in Washington. The department uses this electronic list to notify interested parties about permits for facilities that recycle, treat, store, or dispose of dangerous waste or used oil.

Notices may be regarding:

- Proposals to site a new facility
- Decisions to issue or deny permits
- Requests to modify existing permits
- Decisions to approve or deny permit modifications
- Plans to close a facility

Please join the free [electronic listserv](#) today!



Ecology Studying Toxic Runoff from Roofing Materials

The recently completed [Puget Sound Toxics Assessment](#) indicated that run-off from roofing materials appears to be a source of toxic pollutants to waters in the Puget Sound basin. Ecology is studying the issue, using a grant from the [National Estuary Program](#) of the US Environmental Protection Agency.

Roofing materials may be sources of arsenic, copper, cadmium, zinc, and possibly PAHs (polycyclic aromatic hydrocarbons) and phthalates. [These pollutants can harm fish](#) and other living organisms, including people. This pilot study will help collect more precise data specific to our region.



Ecology staff sampling runoff from the roofing material installation.

Ecology prepared for the study by working with roofing manufacturers and their associations from across the country. This enabled the department to refine the study design and focus. These stakeholders will also provide input to Ecology on the report and recommendations for follow-up actions based on the study results.

The study uses a variety of residential and commercial roofing types, ranging from cedar shakes and asphalt shingles to metal and built-up roofing. This study only examines new roofing materials, not other roof elements such as flashings, downspouts, or HVAC assemblies.

There are 18, 4-by-8-foot roof panels set up in the meadow behind Ecology's Lacey building. Roofing manufacturers provided the products and construction expertise. Ecology staff plan to collect runoff samples from approximately 10 rain events by May.

Results from this research will be available in early 2014. Contact [Alli Kingfisher](#) if you have any questions about the project.

New Publications Explain Ecology's Services and Requirements

There's new information out on the universal waste rule for batteries and on how Ecology's services add value to businesses. Those are just two of the topics covered by the five new or updated publications Ecology produced in January and February.

[Focus on Local Source Control Partnership](#) (#13-04-002, 2/13), describes the program that uses one-on-one site visits to help small businesses with preventing pollution.

[Focus on Ecology Services Add Value to Business](#) (#11-04-023, Rev. 2/13), reveals how Washington businesses have used Ecology's various services to save more than \$65 million. Includes 15 new, real-life examples of benefits to businesses.

[Focus on Enforcing Dangerous Waste Rules Prevents Pollution](#) (#10-04-029, Rev. 2/13), covers Ecology's inspection and enforcement system. With four examples of actual enforcement cases that protected people and the environment.

[Universal Waste Rule for Batteries: WAC 173-303-573\(2\)](#) (#98-407a, Rev. 1/13), provides answers to frequently asked questions about safe handling of batteries and the less-burdensome requirements under the Universal Waste Rule.

[Global Reporting Initiative Summary Report](#) (#13-04-005, 2/13), shows how Ecology "walks our talk" on sustainability, using a worldwide standard of measurement and achievement.



This Survey is Not Spam

Some dangerous waste generators will be contacted this spring for a survey about Ecology's outreach and education efforts (including the Shoptalk newsletter). We hope the information collected in the survey will help us create the most effective outreach and education materials and make the most efficient use of taxpayer dollars.

If you are selected to participate, you will receive a letter in the post with instructions. The survey questions will be provided online. Please respond as quickly and completely as possible. That will keep the costs down and help us do a better job providing you with information you want.



The Research Center at Washington State University in Pullman is conducting the survey for Ecology's Hazardous Waste and Toxics Reduction Program. If you have any questions, please contact Mariann Cook Andrews, at (360) 407-6740, e-mail: maco461@ecy.wa.gov.

Links to Resources Mentioned in this Issue

Five Minutes to Safer Waste Handling...and Fewer Violations

- **Dangerous Waste Containers: an Open and Shut Case, Ecology video #13-04-006:**
<https://fortress.wa.gov/ecy/publications/SummaryPages/1304006.html>
- **Keep Dangerous Waste Containers Closed:**
www.ecy.wa.gov/programs/hwtr/manage_waste/closedContainers.html
- **Appropriate Containers for Dangerous Waste:**
www.ecy.wa.gov/programs/hwtr/manage_waste/containers.html
- **Shop Guide for Dangerous Waste Management, #09-04-015:**
<https://fortress.wa.gov/ecy/publications/SummaryPages/0904015.html>
- **Ecology Regional Offices:** www.ecy.wa.gov/org.html

Comments Due May 3 on Guidance for Safer Alternative Chemicals

- **Guidance for Alternatives Assessment and Risk Reduction website:**
www.newmoa.org/prevention/ic2/aaguidance.cfm
- **Submit comments to:** <http://blog.purestrategies.com/ecology/Providing-Comments>
- **US EPA's Design for the Environment Alternatives Assessment Program:**
www.epa.gov/dfe/alternative_assessments.html
- **Safer Chemicals, Safer World:**
<http://blog.purestrategies.com/stateofwashington/departamentofecology/alternatives-assessment>

Effective Cleaning the Greener Way

- **Green Seal:** www.greenseal.org/GreenBusiness/Standards.aspx
- **EcoLogo:** www.ecologo.org/en/
- **US EPA's Design for the Environment:** www.epa.gov/dfe/index.htm
- **Ecology's Buy Green, Save Green website:** www.ecy.wa.gov/programs/swfa/epp/
- **Tina Simcich, Department of Ecology:** tina.simcich@ecy.wa.gov

Join a Listserv to Learn About Dangerous Waste Facilities

- **Dangerous Waste Facilities-Public Notice Listserv:** <http://listserv.wa.gov/cgi-bin/wa?SUBED1=DWFACILITIES-PUBLIC-NOTICE&A=1>
- **Nancy Farman, Department of Ecology:** nancy.farman@ecy.wa.gov
- **DW Annual Report Web site:** www.ecy.wa.gov/programs/hwtr/waste-report/index.html

Ecology Studying Toxic Runoff from Roofing Materials

- **Puget Sound Toxics Assessment:** www.ecy.wa.gov/puget_sound/toxicchemicals/index.html
- **National Estuary Program:** <http://water.epa.gov/type/oceb/nep/index.cfm>
- **Harmful Pollutants:** www.ecy.wa.gov/puget_sound/toxicchemicals/effects.html
- **Allison Kingfisher:** Allison.kingfisher@ecy.wa.gov

New Publications Explain Ecology's Services and Requirements

- **Focus on Local Source Control Partnership, #13-04-002:**
<https://fortress.wa.gov/ecy/publications/SummaryPages/1304002.html>
- **Focus on Ecology Services Add Value to Business, #11-04-023 (rev. 2/2013):**
<https://fortress.wa.gov/ecy/publications/SummaryPages/1104023.html>
- **Focus on Enforcing Dangerous Waste Rules Prevents Pollution, #10-04-029 (rev. 2/2013):**
<https://fortress.wa.gov/ecy/publications/SummaryPages/1004029.html>
- **Universal Waste Rule for Batteries: WAC 173-303-573(2), #98-407a (rev. 1/2013):**
<https://fortress.wa.gov/ecy/publications/SummaryPages/98407a.html>
- **Global Reporting Initiative Summary Report, #13-04-005:**
<https://fortress.wa.gov/ecy/publications/SummaryPages/1304005.html>